

a company composed of men belonging to the works, and his example contributed essentially to the present state of efficiency of the corps. He joined the Institution of Civil Engineers, as a Member, in the year 1857, and was a Member of the Council of the Institution of Mechanical Engineers, of Birmingham.

His decease occurred almost suddenly, and in an unexpected manner. It had been the custom for him to make an annual visit to the Continent, generally with his friend Mr. Charles Manby. When the usual period for the journey approached, although they had both been somewhat indisposed, they did not see any reason for postponing their departure, but they travelled more leisurely than usual as far as Turin, where Mr. Weallens' state caused his companion so much uneasiness that he called in medical advice; but he was assured that the journey further south could be undertaken with safety, and probably even with benefit to the invalid. On arriving at Genoa, on consulting a physician of eminence, it was, however, thought desirable to return home, and Mr. Weallens was taken to Marseilles by sea, and thence, in a bed-carriage on the railway, to Paris, which was reached with comparatively little fatigue at seven o'clock on the evening of Saturday, the 1st of November, 1862. The best medical advice was immediately sought, but a sudden change occurred, and in spite of the most skilful treatment, the patient sunk rapidly, and expired at two o'clock on the morning of Sunday the 2nd of November, 1862. So tranquil was his end that the actual moment of his decease was only perceived from the inability to swallow the liquid which was administered to him in spoonful at very short intervals, by Mr. Manby, who from the commencement of the serious attack had not left him, day or night.

His remains were brought to England, and were interred in the family vault at Ponteland, near Newcastle-on-Tyne, on Saturday, the 8th of November, 1862, when a well-deserved tribute of respect was paid to his memory by the attendance of his partners, a large number of his fellow-townsmen, the workmen from the factory, and a large body of Volunteers under arms, all anxious to pay the last tribute of respect to the memory of a man who had been so deservedly beloved and esteemed, and who, at the early age of 40 years, had been removed so suddenly from amidst a large circle of friends. A mural tablet was subsequently erected to his memory in the church at Ponteland, by a few of his attached friends.

LIEUTENANT-COLONEL JOHN FRASER LODDINGTON
BADDELEY, Royal Artillery, Chevalier of the Legion of Honour,
and of the Order of Medjidie, &c., was the sixth child of the late
Major John Baddeley, Superintendent-General of the Barracks

in Ireland, formerly of the 7th Hussars and 22nd Light Dragoons. At fifteen years of age young Baddeley joined the Military Academy, Woolwich, and at seventeen he obtained his commission in the Royal Artillery. His earliest services were in Ireland and in the West Indies, and on his return he was appointed to the Horse Artillery. On his promotion he was made Adjutant to the Tenth Battalion, but this appointment he resigned, and volunteered for the Crimea, where he was appointed Acting-Adjutant to Colonel Lake, R.A., and was attached to the Light Division under Sir George Brown. He was present at the actions at Boulganak, the Alma, Balaclava, and Inkerman, where he was dangerously wounded. He received the Crimean Medal with four clasps, the Legion of Honour, the Order of the Medjidie, and the Turkish Medal, and was appointed shortly afterwards second officer of the Royal Powder Works, Waltham Abbey, where he remained five years. He was subsequently made Assistant-Superintendent at the Royal Small Arms Factory, Enfield Lock, where he died, after one week's illness, aged thirty-six, leaving a widow and six children to follow his early and untimely death.

The service thus lost an excellent officer, and the department to which he was attached, a most able and valuable assistant. The great mechanical abilities and untiring devotion to his duties which he exhibited during the period of his service at the Royal Gunpowder Factory at Waltham Abbey, as well as at the Royal Small Arms Factory, justly entitle his loss to be regarded in the light of a public one. The funeral of this much-lamented officer took place at Enfield on the 1st of March, 1862, and was conducted with more than the usual military honours due to his rank, being attended by a considerable body of troops, both regulars and volunteers. A spontaneous and most gratifying exhibition of feeling was shown by the workmen of the factories at Enfield and Waltham Abbey, who in a body of upwards of twelve hundred men accompanied the remains of the deceased officer to their last resting-place. The universal feeling of regret at the loss they have sustained, as well as the deep estimation in which he was held, have been shown by the publication of most creditable compositions in verse by workmen of the factory, and also by a subscription raised amongst themselves for the purpose of erecting a marble tablet in the church of the factory to the memory of their departed and acknowledged friend.

Lieutenant-Colonel Baddeley possessed all the qualifications for eventually attaining a very distinguished position. He had clear intuitive perception, good judgment, indefatigable industry, and had studied hard to extend his scientific and mechanical knowledge. To him may be ascribed the merit of the introduction to the service of the foreign mode of purifying saltpetre; and he published

a tract, "On the Manufacture of Gunpowder, as carried on at the Government Factory, Waltham Abbey (1857)." ¹

On becoming attached to the Royal Small Arms Factory, at Enfield, he immediately took a marked position; and if his life had been spared, he would have taken a very active and useful part in the War Office Manufacturing Department.

He was a general favourite in the branch of the service to which he belonged, and his decease was deeply and deservedly regretted by a large circle of friends.

CAPTAIN CARLTON THOMAS COLLINGWOOD joined the Institution of Civil Engineers as an Associate, in the year 1857; and died in India on the 7th of March, 1860.

It is regretted that repeated applications have failed to obtain any materials for a memoir.

COLONEL SAMUEL COLT was born on the 19th of July, 1814, at Hartford, Connecticut, U.S., America. He was of Scotch descent, his father, Christian Colt, being the son of an early settler in Connecticut.

Sam Colt had not the advantage of careful education, and at a very early age he ran away to sea, and made several voyages to India. He had latent mechanical talent and great energy, and it is stated that he was constantly devising some supposed improvements in the tackle, &c., on board, for which the commander did not award him the credit which he imagined was his due; and he turned his attention to a repeating fire-arm which should be also a breech-loader, and thus afford to the solitary pioneers of the Western States the immunity from danger which only could be obtained by rapid firing, in case of attack by the Indians. Whilst at sea he is supposed to have produced the first wooden model of the revolver pistol which bears his name; and it has been asserted that, on his return to America, he fell in with another untaught inventor, like himself, whose attention had also been directed to the same subject, and that he received from this accidental acquaintance the first notions of the necessity of adopting mechanical and automatic machinery for the production of these weapons. For some years he had to struggle with great difficulties, and during that period he turned his attention to other subjects; but always keeping in view the production by machinery of the several parts of the repeating fire-arm, and for this he invented and adapted various machines. He received his first patent in 1835, and established a factory in Paterson, New Jersey, but

¹ Library Inst. C.E. Tract Svo. vol. cxx.